



## Institute for Transuranium Elements Reference Centre for Nuclear Science and Technology



The Institute for Transuranium Elements (ITU) is one of seven Institutes of the European Commission's Joint Research Centre.

ITU provides the scientific foundation for the protection of the European citizen against risks associated with the handling and storage of highly radioactive material.

ITU's prime objectives are to serve as a reference centre for basic actinide research, to contribute to an effective safety and safeguards system for the nuclear fuel cycle, and to study technological and medical applications of radionuclides/actinides.

### ITU'S Research Activities

- **Nuclear Waste Disposal:** properties and behaviour of high level waste from current and future nuclear fuel cycles
- **Alternative Nuclear Fuel Cycles:** reduction of the radiotoxicity of spent fuel and long-lived waste
- **Fundamental and Applied Actinide Research:** basic understanding of nuclear materials and fuel processes
- **Alpha-Immunotherapy:** application of Alpha-emitter therapy of cancer and infectious diseases
- **Measurement of Radioactivity in the Environment and Biological Matrices:** verification of radioactive discharges and emissions from nuclear installations
- **Knowledge Management, Training and Education:** preserving, developing and disseminating knowledge in the nuclear field
- **Safety of Conventional Nuclear Fuels:** study of detailed behaviour of nuclear fuels in today's reactors
- **Safety of Advanced Nuclear Fuels:** advanced sustainable fuels, EURATOM contribution to Gen IV International Forum (GIF)
- **Nuclear and Trace Analysis for Safeguards:** trace analysis for the detection of clandestine nuclear activities, technical and scientific support to the implementation of nuclear material safeguards and international non-proliferation treaty
- **Forensic Analysis and Combating Illicit Trafficking:** preventing illicit trafficking of nuclear and other radioactive materials

#### Contact

Gabriele Tamborini  
Press and Public Relations  
European Commission • Joint Research Centre  
Institute for Transuranium Elements  
Tel. +49 7247 951275 • Fax +49 7247 951591  
E-mail: [gabriele.tamborini@ec.europa.eu](mailto:gabriele.tamborini@ec.europa.eu)